Listing of the Claims

Claims 1-5 (canceled)

Claim 6 (previously presented): A source having an impedance and connected to a load, the source comprising:

a detection circuit to determine whether a current flow through the impedance is load-induced or source-induced; and

a processing circuit to perform an operation based upon whether the current flow is load-induced or source-induced,

wherein the source is a measuring instrument further comprising an output indicator which indicates whether the current flow is source-induced or load-induced.

Claims 7.-23 (canceled)

Claim 24 (previously presented): The source according to claim 6, wherein the detection circuit determines polarities of the current flow and an output voltage across the load, and determines the current flow to be source-induced or load-induced based upon the determined polarities of the current flow and the determined output voltage.

Claim 25 (previously presented): The source according to claim 6, wherein the detection circuit determines polarities of the current flow, and determines the current flow to be source-induced if the determined polarities are the same and load-induced if the determined polarities are opposite to each other.

Claim 26 (previously presented): The source according to claim 6, wherein the source is an active harmonic filter that selectively opposes currents generated by local harmonic sources while not generating signals to oppose currents caused by harmonic voltage sources located elsewhere in a system.

Claim 27 (previously presented): The source according to claim 6, further comprising:
a voltage source to generate an output voltage;

a DC offset elimination circuit, which is a DC servo control loop connected to the voltage source, to eliminate DC offset voltages of the output voltage; and

an output impedance circuit, which is feedback loop connected to the voltage source, to generate an output impedance for the source and which operates simultaneously with the DC offset elimination circuits, wherein

the detection circuit is connected between the DC offset elimination circuit and the output impedance circuit, and determines whether the current flow is load-induced or source induced, and

the processing circuit eliminates current flow which is determined by the detection circuit to be source-induced.

Claim 28 (previously presented): The source according to claim 27, further comprising:
a gain varying circuit which adjusts magnitudes of resistive and inductive components of the output impedance circuit.

Claim 29 (withdrawn): A method comprising:

connecting a measuring instrument having an impedance to a load; detecting a current flow through the impedance;

determining whether the detected current flow is load-induced or source-induced;

indicating with an output indicator whether the determined current flow is load-induced or source-induced; and

performing an operation in accordance with the indication of the output indicator.

Claim 30 (withdrawn): The method according to claim 29, further comprising:

detecting the polarities of the current flow and an output voltage across the load; and

wherein said determining determines whether the current flow is source-induced or load-induced based upon the detected polarities of the current flow and the detected output voltage.

Claim 31 (withdrawn): The method according to claim 29, further comprising:

determining the polarities of the current flow and an output voltage across the impedance; and

wherein said determining determines the current flow to be source-induced if the determined polarities are the same and load-induced if the determined polarities are opposite to each other.

Claim 32 (withdrawn): An apparatus comprising:

a measuring instrument having an impedance and connected to a load,

said measuring instrument having detecting means for detecting whether a current flow through the impedance is load-induced or source-induced and providing an output in accordance with the detection; and

means for performing an operation based upon whether the current flow is load-induced or source-induced in accordance with the output.

Claim 33 (withdrawn): The apparatus according to claim 32, wherein the detection means determines polarities of the current flow and an output voltage across the load, and determines the current flow to be load-induced or source-induced based upon the determined polarities of the current flow and the output voltage.

Claim 34 (withdrawn): The apparatus according to claim 32, wherein the detection means determines polarities of the current flow and an output voltage across the impedance, and determines the current flow to be source-induced if the determined polarities are the same and load-induced if the determined polarities are opposite to each other.

Claim 35 (withdrawn): The apparatus according to claim 32, wherein the measuring instrument has an active harmonic filter that selectively opposes currents generated by

local harmonic sources while not generating signals to oppose currents caused by harmonic voltage sources located elsewhere in a system.

Claim 36 (withdrawn): The apparatus according to claim 32, further comprising:

a voltage source to generate an output voltage;

a DC offset elimination circuit, which is a DC servo control loop connected to the voltage source, to eliminate DC offset voltages of the output voltage; and

an output impedance circuit, which is feedback loop connected to the voltage source, to generate an output impedance for the source and which operates simultaneously with the DC offset elimination circuits, wherein

the detection means is connected between the DC offset elimination circuit and the output impedance circuit, and determines whether the current flow is load-induced or source induced, and

the processing circuit eliminates current flow which is determined by the detection means to be source-induced.

Claim 37 (withdrawn): The apparatus according to claim 36, further comprising:
a gain varying circuit which adjusts magnitudes of resistive and inductive components of the output impedance circuit.